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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/499,705	02/08/2000	Henry Chuang	LEE1P005	1643

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EXAMINER

DINH, TUAN T

ART UNIT PAPER NUMBER

2841

DATE MAILED: 12/27/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/499,705

Applicant(s)

CHUANG ET AL

Examiner

Tuan T Dinh

Art Unit

2841

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 October 2001.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 6-9 and 11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 6-9 and 11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Drawings*

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “**conversion means**, claim 6, line 5” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-3, 6-9 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 and 7, lines 1-3 are vague and indefinite because the reference to “**Flex ATX specification and a Micro ATX specification**” in the claims make the claims inherently vague and indefinite as industry standards are subject to change and/or revision.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-9, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schuck (U. S. Patent 4,400,049) in view of Talbot et al. (U. S. Patent 6,259,600).

**Schuck discloses as to claim 1** a motherboard assembly shown in figure 4 comprising:

a motherboard (54, column 4, line 15); and  
an expansion card (48, column 4, line 11) detachably connected to said motherboard for providing at least one slot (10, column 4, line 12),  
wherein said motherboard and said expansion card are arranged connecting in a coplanar fashion (see figure 5).

Schuck does not teach the assembly having type of ATX specification. However, Talbot shows in figures 1-8 a motherboard type of ATX specification standard (12, column 4, lines 35-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use **ATX standard specification motherboard** which is conventional motherboard type as taught by Talbot to modify the assembly of Schuck in

order to provide a mechanical configuration such that system failures are reduced and components interchangeability are maintain.

**Schuck discloses as to claim 2** the motherboard assembly shown in figure 4 wherein said motherboard (54), at first edge thereof, is provided with a first connection device (52, column 4, line 15); and

said expansion board, at a second edge thereof, is provided with a second connection device (not shown, see figure 4) for making connection thereof to the first connection device.

**Schuck discloses as to claim 3** the motherboard assembly shown in figure 4 wherein when the expansion board is connected to the motherboard. The second edge is adjacent to the first edge (see figures 4 and 5).

**Schuck discloses as to claim 6** a motherboard assembly shown in figure 5 wherein said first connector device (52) and second connection device comprise a first bus (a connector 52); the at least one slot of the expansion card comprises a slot of a second bus (10).

**Schuck discloses as to claim 7** a motherboard assembly shown in figure 5 comprising:

a motherboard (62), and first and second expansion boards (60, 66);

said first expansion board being detachably connected to said motherboard (62) having at least one first slot (10);

said second expansion board (66) being detachably connected to said first expansion board (60) having at least one second slot; and

wherein when the second expansion board is connected to the first expansion board and the first expansion board is connected to the motherboard at the same time arranging in a coplanar fashion (see figure 5).

Schuck does not teach the assembly having type of ATX specification. However, Talbot shows in figures 1-8 a motherboard type of ATX specification standard (12, column 4, lines 35-37).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use **ATX standard specification motherboard** which is conventional motherboard type as taught by Talbot to modify the assembly of Schuck in order to provide a mechanical configuration such that system failures are reduced and components interchangeability are maintain.

**Schuck discloses as to claim 8** the motherboard assembly shown in figure 5 wherein the motherboard, at a first edge thereof, is provided with a first connection device, and the first expansion board, at a second edge thereof, is provided with a second connection device for making connection thereof to the first connection device. The first expansion board, at a third edge thereof, is provided with a third connection device on a third edge thereof, and the second expansion board, at a fourth edge thereof, is provided with a fourth connection device for making connection thereof to the third connection device (not shown, see figure 5).

**Schuck discloses as to claim 9** the motherboard assembly shown in figure 5 wherein when the first expansion board is connected to the motherboard, the second

edge is adjacent to the first edge, and wherein when the second expansion board is connected to the first expansion board, the fourth edge is adjacent to the third edge.

**Schuck discloses as to claim 11** the motherboard assembly shown in figure 5 wherein the first and second connection devices (10) comprise a first bus, respectively. The at least one slot comprises a slot of a second bus.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-3, 6-9, and 11 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan T Dinh whose telephone number is 703-306-5856. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on 703-308-3301. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-308-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

TD  
December 17, 2001

  
Jayprakash N. Gandhi  
Primary Examiner  
Technology Center 2800